Did you know the Cedar Hills Regional Landfill is one of the largest landfill renewable energy producers in the United States?

2,300 tons of trash come into the landfill on average each day. The decomposing organic material forms carbon dioxide and methane gases. In 2013, the landfill generated about 9,000 cubic feet per minute of gas.

The gas control system minimizes gas emissions escaping through the ground or through the air. The gas is captured through a network of pipes and sent to the Bio Energy Washington (BEW) gas-to-energy plant on site.

The BEW plant – in operation since October 2010 – processes the landfill gas into pipeline-quality biogas and electric power. When the BEW plant is in operation, residual impurities are destroyed by the plant's thermal oxidizer. When the facility is down for maintenance, all landfill gas is destroyed at the landfill's North Flare Station and/or at BEW's landfill gas flare. Along with biogas, BEW generates over **15 million kilowatt hours** of electricity from landfill gas to help offset the facility's electricity use.

Selling biogas produced by the BEW plant generates up to **$2 million** annually for the King County Solid Waste Division, helping to keep solid waste disposal rates low. 15.5 million therms of renewable natural gas are produced each year. This reclaimed resource equals the amount of energy needed to meet the natural gas needs of over 19,000 homes in King County or to substitute for the energy use of **11.2 million gallons** of diesel fuel.

King County
Department of Natural Resources and Parks
Solid Waste Division

Waste Prevention | Resource Recovery | Waste Disposal

www.kingcounty.gov/solidwaste

Climate Change Benefits

Converting previously flared landfill gas into renewable energy means that an equal amount of non-renewable energy – fossil fuels like natural gas, coal, or oil – do not need to be consumed. This reduces greenhouse gas emissions by about **82,300 metric tons** per year. It also reduces emissions of air pollutants that contribute to smog and acid rain.

Printed on recycled paper – Mar15DK